BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA COLUMBIA, SOUTH CAROLINA

PROCEEDING #18-11705 JANUARY 31, 2018 10:30 A.M.

ALLOWABLE EX PARTE BRIEFING - ND-2017-30-EG

EnerNOC, INCORPORATED — Request for an Allowable Ex Parte Briefing Regarding Modernizing Procurement in South Carolina Electric and Gas Utilities

TRANSCRIPT OF PROCEEDINGS

EX PARTE BRIEFING
VOLUME 1 OF 1

COMMISSION MEMBERS PRESENT: Swain E. WHITFIELD, Chairman; Comer H. 'Randy' RANDALL, Vice Chairman; and COMMISSIONERS John E. 'Butch' HOWARD, Elliott F. ELAM, Jr., Elizabeth B. 'Lib' FLEMING, Robert T. 'Bob' BOCKMAN, and G. O'Neal HAMILTON

ADVISOR TO COMMISSION: Joseph Melchers, Esq. General Counsel

STAFF: James Spearman, Ph.D., Executive Assistant to Commissioners; B. Randall Dong, Esq., and Josh Minges, Esq., Legal Staff; Thomas Ellison and John Powers, Technical Advisory Staff; Jo Elizabeth M. Wheat, CVR-CM/M-GNSC, Court Reporter; and Afton Ellison, Hope Adams, and Deborah Easterling, Hearing Room Assistants

APPEARANCES:

ALEXANDER HOUGHTALING [Director, Wholesale & Government Procurement - EnerNOC] and RAPHAEL HERZ [Manager, Wholesale Procurement Sales - EnerNOC], presenting for ENERNOC, Inc.

ANDREW M. BATEMAN, ESQUIRE, representing the SOUTH CAROLINA OFFICE OF REGULATORY STAFF

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Note: For identification of any additional referenced materials and/or links for same, please see correspondence to be filed by the Office of Regulatory Staff.

Please note the following inclusions/attachments to the record:

- PowerPoint Presentation Slide (PDF)
- A World Bank Study: Electricity Auctions

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PROCEEDINGS

CHAIRMAN WHITFIELD: Please be seated. I'll call the allowable ex parte briefing to order and ask our attorney, Mr. Melchers, to read the docket.

MR. MELCHERS: Thank you, Mr. Chairman.

Commissioners, we're here pursuant to a Notice of Request for Allowable Ex Parte Briefing scheduled for today, here in the Commission's hearing room, January 31, at 10:30. The entity requesting the briefing is EnerNOC and the subject matter to be discussed at this briefing is:

Modernizing Procurement for Electric and Gas
Utilities.

Thank you, Mr. Chairman.

CHAIRMAN WHITFIELD: Thank you, Mr. Melchers.

I'll now call on the Office of Regulatory Staff, Mr. Bateman, for any instructions or anything regarding this allowable ex parte briefing.

MR. BATEMAN: Yes, sir. Good morning, Mr. Chairman, members of the Commission. My name is Andrew Bateman and I'm a staff attorney for the South Carolina Office of Regulatory Staff. I've been selected as the designee to certify today's allowable ex parte briefing that it takes place in

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accordance with South Carolina Code 58-3-260(C)(6).

2	That statute sets forth certain parameters and
3	rules under which this briefing must take place,
4	and if you will indulge me, I'm going to go over a
5	few of those.

First, EnerNOC, Inc., requested this allowable ex parte communication pursuant to South Carolina Code 58-3-260(C). This presentation is limited solely to information Noticed by the company, which was "Modernizing Procurement for Electric and Gas Utilities." I, therefore, ask that everyone here please refrain from discussing any matters not related to that Notice.

Secondly, the statute prohibits any participants, Commissioners, or Commission Staff from requesting or giving any commitment, predetermination, or prediction regarding any action by any Commissioner as to any ultimate or penultimate issue which either is or is likely to come before the Commission.

Next, if I've counted my days correctly, a transcript of today's proceedings will be posted on the Commission's website by the end of the day next Tuesday. Any document referenced or utilized today should be included with that posting.

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Fourth, I ask that the participants,
Commissioners, and Staff refrain from referencing
any reports, article, statutes, or documents of any
kind that are not included in today's presentation,
to prevent the need of having to try to track down
copies or links to those documents to include in
the record. I would also note that none of the
information contained in the presentation appears
to have been marked or requested to be granted
confidentiality, and I ask that the presenters
please refrain from referencing or discussing any
confidential materials. This is a public briefing.
And I ask that everyone please understand, if the
presenters decline to provide such information to
the questions here today.
As a final note, please make sure to read,
sign and return the form which you saw at the door

As a final note, please make sure to read, sign, and return the form which you saw at the door as you entered here today. This form needs to be signed by each attendee to certify the requirements contained in South Carolina Code Annotated Section 58-3-260(C) have been complied with for the presentation today.

Thank you for your time, Mr. Chairman. This concludes my opening remarks.

CHAIRMAN WHITFIELD: Thank you, Mr. Bateman.

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I'll now turn it over to the parties, to
EnerNOC, and if you would introduce yourselves, and
 I don't see any counsel here for you, so if you
would, whoever is the lead person, take over and go
in the order you'd like.

MR. HOUGHTALING [EnerNOC]: Great. Thank you, Mr. Chairman. And thank you, Commissioners, for having us here today. We look very much forward to having this conversation.

[Reference: Presentation Cover Page]

My name is Alex Houghtaling. I work for the company, EnerNOC, and I'm joined by my colleague, Raphael Herz. And both of us have spent a lot of time over the past several years meeting with our partners in utility companies across the United States, and I'm sure, as all of you know, utilities are some of the most technically advanced organizations in the country and, yet, we find, despite that, it's often the case that many utilities tend to procure their electricity and gas in ways that haven't taken advantage of modern developments. So we contend that the ability to introduce a higher level of transparency and accountability helps utilities, and creating a market will foster more competition to help secure

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lower rates for ratepayers.

So what we're looking forward to today is sharing with you some of what we present to those utilities and, hopefully, engender a conversation where we can talk about how we feel our methods and our technology can help secure lower rates for ratepayers.

[Reference: Presentation Slide 1]

So we can jump right into the presentation.

So, what we'd like to cover today, first, is what I'm sure you're all familiar with, the importance of procurement. We want to talk specifically about a few procurement methods that we see frequently, talk about some of the best practices that we find, and do a little comparison of procurement methods that are common, talk about our specific technology and process with respect to alt-auction methods, and then overall just touch on the benefits. We appreciate how busy the Commission is, and we will do our best to make our remarks concise, but we think and hope that what we have to offer will be interesting to the panel.

[Reference: Presentation Slide 2]

MR. RAPHAEL HERZ [EnerNOC]: So, good morning.
Raphael Herz, here. And as you, with Alex's kind

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remarks and your time, what we recognize is that procurement is important. It's vitally important. And as Alex said, maybe because it seems conventional, it doesn't receive enough attention.

It's important because a lot of money is transacted. It's important because, if you get it wrong, the ratepayers end up with a burden, collectively, of paying a lot more, and vitally important because, in today's utility era — and we see this at every utility we speak with — in today's era, the rapid landscape transformation, changes in technology and the energy landscape are being blasted at utilities at sort of a hyperspace speed, and the result is that the tendency is to make these long-term decisions look risky, and so we feel that procurement is vitally important because it allows for prudent shorter-term decisions while that landscape continues to evolve. So it's important.

So, why does that matter, and why would we have to have a discussion about it? In short, the space of utility commodity procurement has also changed dramatically over the last decade, harnessing the power of computing, the internet, in the digital age. And we see that, certainly, on

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the supplier side and less so on the utility side.

But before I go into that, I have to provide a bit of context so that you, the Commissioners, understand where we are suggesting change. And that context is going to take a few minutes, so I kindly ask for some of your time as I go through this.

[Reference: Presentation Slide 3]

This slide here outlines typical utility transition types. Utilities buy a vast amount of things, some of which has to go through scrutiny of the Commission and boards, like yours. And I list some of them. This is probably the 80 percent list; it's not 100 percent. And if you look at these transaction types, what you'll see is that, in the long-term asset ownership, the stuff at the top, allows the utility to deal with more uncertainties by getting into long-term supply contracts, such as a PPA for unit-specific power from a power plant. And that makes sense. And those transactions you'll frequently have in front of you, getting your attention.

It's the stuff that's boxed here in the red [indicating] and the daily spot-market type of purchasing that I submit you see much less of,

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okay? And these transactions are also vitally important. Okay?

That leads me to another point. Utilities have many tools at their disposal, and certain tools are better suited for certain types of procurements. So at the top, these long-term decisions and procurements, are better suited for certain types of tools. It's like this: If you open up your kitchen drawer, when you need to scoop up something, you're not going to grab the knife, okay? So certain tools for certain applications. And we're here to share with you what others are doing and how they're looking at these tools. And for this area of procurement, we submit what we're going to talk about in that red space [indicating] gives a utility operational and business flexibility in that rapidly evolving landscape. And that area is often overlooked for modernization. I'll submit to you, if utilities harness the power of the well-documented benefits of modernizing this area of procurement, utilities will be better able to manage risk, be more efficient, and the ratepayers over time — and even in the very near term — customers of the utilities will be rewarded from the benefits of optimal

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procurement.

[Reference: Presentation Slide 4]

So we're going to take a moment here and look at the evolution of procurement methods, okay, and let me walk you through a little bit of it as we have seen in other states and markets. So, long time ago when utilities started buying power and natural gas, it was done by what I would consider standard bidding process, where the buyer would request pricing for a particular product and the seller would request — would provide the cost of that product. That's what we're seeing over here on the left side, the sealed-bid method. The buyer would compare the prices and make a judgment as to which entity was the right one to go with.

On a technology side, this started out with letter, and then phone calls — for commodities — and then faxes, and e-mails with spreadsheets, and now instant messaging. And utilities in America still request bids by e-mail and instant messaging, because the system works and they know the commissions approve. And that's important.

Now, in various markets — if you look at the middle box there — over the last couple of decades, we've seen adoption of what we call descending

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clock auction. I'm just going to walk through this, so you can be aware of this type of procurement.

It's particularly useful if the value of what is being auctioned, the thing being bought or sold, is not readily known, and the buyer wants to make sure there's supplier diversity among the counterparties and that everybody gets the same price. This procurement style was adopted from the wireless space, right, like when the FCC would auction particular bands of spectrum in a geographic market. Let me give you an example: Before everybody had a cell phone, we might be going out to cell phone service providers and say, "Who wants to bid on the Columbia metro market?" And since we don't know who's going to buy a cell phone in the future, maybe that market is worth \$100 million or maybe it's worth \$5 million. so we make sure — to make sure the person who bids that \$100 million doesn't vastly overpay, the descending clock option was run, and all the service providers received the same price for their portion of the market. And the challenge with this is that the bidding stops once the least competitive supplier drops out. The mechanics of

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it: You go back to the price where the least competitive supplier can participate, and those who are more competitive are enjoying the benefits of receiving the payment that exceeds their lowest cost to provide that service. So, descending clock make sense in certain types of procurement. The federal government uses them to auction land rights in the Atlantic Ocean for offshore leasing. And since we don't really know how much it costs to install and maintain and operate a wind turbine out in the Atlantic, it makes sense out there.

But with the advancements of technology, we see the use of a historic auction method being implemented online, and that's in that final box on the right. The online reverse auction. I'm sure that you're familiar with an example of this in your day-to-day life. It's live-streaming so that everybody participates at the same time against a running clock. And, we contend, for commodities, in which we all can easily determine what the price is, just as if you were to buy shares of Amazon or Apple in an online brokerage account, for commodities we contend that the reverse online auction is the most efficient, most transparent, and results in, over time, consistently the best

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rate	for	ratepayers.
		. acopayor or

I'm going to go into further detail on this in a minute, but let me just say these procurement methods have been tested, used, and are still being implemented. They're tools in the toolbox.

There's times when one makes sense and the other one doesn't.

So, why should you, as a commission, care?

Let me provide a little bit of additional context.

[Reference: Presentation Slide 5]

All right. So we're going to look through at some of the symptoms that we see in imperfect procurements, when things go wrong, okay?

No one bidding. That's a pretty big one right there. I'm going to skip to the next one: data integrity. Utilities need their data to be secure and suppliers need their data to be secure, and when things don't go as expected, either on the IT side or in other places with the human error, that's a problem.

Let me explain bidder fatigue. In a descending clock auction, for example, with the federal government auctioning off leasing rights on the Atlantic shore, the process took two days.

Okay? The folks on the other side, the suppliers,

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they are definitely experiencing fatigue, because
they've got to wait for all these cycles to go
through to find out what that lowest prices is, and
you have people dropping out because it's simply
not worth it to wait that long.
So in a sealed-bid environment, there's little

So in a sealed-bid environment, there's little opportunity for a supplier to see what others are bidding and to change their price, and that's the bottom bullet right there. If you, as a supplier, can't figure out what others are bidding, you can't make a business decision, "Do I want to adjust my price to earn this other party's business?"

Alex, you want to add?

MR. HOUGHTALING [EnerNOC]: Sure. Thanks, Raphael.

The only thing I would add on this is that I've really enjoyed my time learning about auction theory. And some of it remains theoretical in the sense that some auctions are better matched for certain types of products than others, as Raphael shared. What I've been impressed with is how humble and tactical some of the elements that make for a successful auction are, and some of them are listed here. In particular, something like bidder fatigue. It seems like something that really

1	shouldn't be an issue, but, ultimately, how
2	auctions are actually deployed and how the process
3	actually works has a big impact on the overall
4	results. So, one of the things that we found over
5	the years is that the details do matter, and that
6	our ability to not just provide a technological
7	solution to help increase the level of transparency
8	for bidders, to drive that competition, but also,
9	as I mentioned earlier, bringing forth a method
10	that makes it easier for people to participate in
11	these auctions, I contend, increases that level of
12	competition and the overall benefit. But these are
13	just, I think, some interesting things that we've
14	seen over the years, that are real and make for
15	potentially a better process, moving forward, with
16	reverse online auctions.
17	MR. RAPHAEL HERZ [EnerNOC]: Commissioners, we
18	didn't walk through all those bullets. Do you have
19	any questions about anything that you see up here?
20	Or should we proceed? Proceed? Go ahead.
21	CHAIRMAN WHITFIELD: I think we're going to
22	hold questions until the end, and we can come back
23	to this slide if we need to.
24	MR. RAPHAEL HERZ [EnerNOC]: Absolutely.
25	Thank you, so much.

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CHAIRMAN	WHITFIELD	: But we'l	11 make a	note,	if
anybody has a	question a	about this	slide an	d come	
back later.					

MR. RAPHAEL HERZ [EnerNOC]: All right. Great.

[Reference: Presentation Slide 6]

So, on the flipside, you know, what makes for optimized procurements? And so maybe that old-fashioned mechanism of sealed bid, even though it's been modified for text messages and phone calls and, you know, not using fax machines, maybe that methodology is obsolete as a result, and suppliers can extract greater profit. Utilities should take advantage of the technological advancements that facilitate reduced cost, but also increased transparency.

The old-fashioned way of doing things definitely works, right? And they definitely have applicability. But they're not as time-efficient and they're more difficult to audit, and that becomes important. They have high transaction costs because, in terms of efficiency, because of the back-and-forth negotiation, they don't offer true price discovery, as well, to a supplier. That's not bad. It's okay. But we believe there's

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room for improvement.

And so let me just see if I can give you an Someone might say, "Well, I get my bids by instant message and I compare, and I choose the lowest one." That's a sealed-bid process, and maybe they go through multiple rounds of that. The issue that you have here is that the buyer is acting as a referee. They're participating in this, which is perfectly fine because it's part of negotiation, but if you've ever watched any football you know that referees can make mistakes. And there are definitely subjective elements. by limiting the data elements to one or two variables and compressing these transactions into small units of time, we activate certain human elements in competing - Alex alluded to that - we provide price discovery, so that a supplier can come down in their price and adjust it for winning the business; and we eliminate some of that subjectivity and mistakes on the side of the buyer.

So I want to frame it up just a slightly different way. You see here some of the characteristics of an optimized procurement. What does it take and what are the results? But, with the advanced technology and supercomputing, on the

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supplier side of these commodity transactions,
they've beefed up their side to take advantage of
that technology, and we haven't seen so much on the
side of the utilities. This is what has changed.
The suppliers are adept at running these
transactions and squeezing more out of it for them,
and as a result, you have what I consider asymmetry
of information where they've got a little bit more
and we've got a little bit less, and that yields a
sub-optimal procurement outcome for buyers.
They've got the competitive advantage, and we're
seeing this in many other areas of the utility-as-
a-buyer landscape. So if you're not taking
advantage of it, the ratepayers are paying more
over time.

Alex?

MR. HOUGHTALING [EnerNOC]: I think just — I think we made the point a few times. I'm sure it's clear. But the best way I can articulate it is that, Raphael's point, while sealed bids do, of course, work, the challenge becomes that the suppliers tend to submit the offer that they think the buyer will accept, which is not necessarily the price that the suppliers can afford. And it would be similar to a real estate transaction where, if

you're buying a condo or a house, you, of course,
submit what you think will be accepted, if you
really want the house. But if you want it more,
you'll put in a more aggressive offer. And we
contend that it is the transparency that online
real-time auctions afford that allows the referee
to be removed and allow people to just bid and get
the business if they want it. And I can see for
myself, having been in that position from a real
estate standpoint, you know, having lost a property
by a few thousand dollars, I would've happily paid
a little bit more to get the place but I just
didn't know that that was the offer. So for me,
that really struck home as analogous to what
suppliers and buyers are dealing with in the
wholesale market, which is, "Hey, if you know you
can get the business and all you have to do is be a
little bit more aggressive, wouldn't having that
knowledge, wouldn't having that price discovery
help all parties?"
MR. RAPHAEL HERZ [EnerNOC]: So you've got
these optimized procurements and you've got these
things as outcomes —
[Reference: Presentation Slide 7]

- but, really - you've heard us say it, and so

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we won't beat it to death — but what you get when
we run these transactions, and we run them all over
the United States and into Canada, what we see is
that lower ratepayer costs, increased transparency,
which helps all parties — suppliers, buyers, folks
that are interested in tracking what happened — and
because it's information technology, this is really
no surprise, it's immediately available. You can
produce a record of what happened within a matter
of hours, and a hard copy within, you know, a
couple of days. So folks that need to review it
can review it, and by making the pricing
information transparent, suppliers can bring down
their price to win the business.

Anything you want to add on that, Alex?

MR. HOUGHTALING [EnerNOC]: No. Well said.

MR. RAPHAEL HERZ [EnerNOC]: All right. So, you'll remember the slide where I talked about the sealed bid, the descending clock, and the reverse online auction.

[Reference: Presentation Slide 8]

This is just a simple graphic that looks at all three of them and gives you, as you look across the top of the table, what we consider some of the key criteria when we look at these transactions,

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how they match up. Price discovery, I think you
now understand what that is. Speed and efficiency,
I think you can gather what that is. Bid
improvement is this notion that, if a supplier
wants to improve their bid to win the business,
they have the ability. And the ultimate outcome:
The best price for the ratepayer. And this is how
we see it. I'll go back to, they're all tools in
the toolbox. There's times to use one and not the
other, right?
[Reference: Presentation Slide 9]
On this next slide, I'm going to stand up a
little bit and do a little bit of explanation here,
just because it's easier. So, this is a real
transaction. When I say "real" this was roughly a

year ago, April. It's a gas transaction, but they're commodities, so it really doesn't matter. This is what we consider an ordinary bid curve. This is, across the bottom [indicating] — oops.

MR. MELCHERS: You don't want to touch the screen.

MR. RAPHAEL HERZ [EnerNOC]: Yeah, did I touch Well, I'll stand over here. I'll use my pen. There we go. All right. Thank you.

So, ordinary bid curve. Across the bottom,

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these are bids being placed,	right? This is a bid,	,
that's a bid, that's a bid.	And this is the dollar	~
oer MMBtu, which just is a u	nit of measure.	
Dollars per something, okay?	ı	

The bidders are coming in at the opening price, which we work with — we just set, okay? And as the auction progresses, they see the price and they bring that price — their price — down, as they continue to bid. It's pretty simplistic, to the end of the auction. This auction lasted for 10 minutes and had 33 unique bids and 13 bidders.

Okay? And somebody earned some business at the end.

[Reference: Presentation Slide 10]

So I want to now explain what you saw there, okay, and if you'll just indulge me for a second. This [indicating] is time, counting down, right here. This is more or less the beginning of time; this is the end of the time of the auction, okay? In the early stages, we had a bidder give us an opening. All right? Everybody gets in on the system. They don't give us an opening bid — if they don't give an opening bid, they can't see. In the process of the auction, the folks that are bidding test the waters and improve their bids.

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Through the midway, they continue to test and refine their bids. And at the tail end, somebody wins. And in an optimized procurement, you've got what is, in effect, a sealed bid at the very end, so that we see this, in our experience, 20 percent of the time: A bidder will improve their own price. You do not see this in a typical sealed bid, are, definitely, in a descending clock auction.

Let me say that again. In this example,
Bidder A had won, already. But because they
weren't sure what somebody else was going to do,
what somebody else was going to enter into the
online browser, they decided to improve their bid.
Now, these [indicating] are just units. This is
against an index and, you know, basically, what the
bidder was saying is, "I, Bidder A, said my offer
is a penny less than the index."

MR. HOUGHTALING [EnerNOC]: [Indicating.]

 $\label{eq:MR.RAPHAEL HERZ [EnerNOC]:} \textbf{Alex}, \textbf{ thank you}.$ Even with the pen.

Penny less than the index. But even in the last few seconds, they improved their bids so that they said, "You know what, I improve my bid to a penny and a quarter less than the index," all right? We don't see this in sealed bid.

1	And, Alex, you want to add anything to that?
2	MR. HOUGHTALING [EnerNOC]: I think that the
3	point that Raphael just made about the penultimate
4	bid being the same as the winning bid is important,
5	because that strongly suggests that this will
6	deliver savings for ratepayers, because — to
7	Raphael's point — if Bidder A had submitted their
8	best and final offer, that would've been it, but
9	because there was the concern of a competitor
10	coming in at the last moment and being more
11	aggressive, even that forced Bidder A to be more
12	aggressive, in itself. So I think that stands as a
13	very significant point, and that point happens
14	frequently. That happens in roughly 20 percent of
15	the many thousands of auctions that we have
16	conducted. So, I think it's a strong point that
17	was made.
18	MR. RAPHAEL HERZ [EnerNOC]: Alex, let's hop
19	to the next slide here, real quick.
20	MR. HOUGHTALING [EnerNOC]: [Indicating.]
21	[Reference: Presentation Slide 11]
22	MR. RAPHAEL HERZ [EnerNOC]: All right. So,
23	again, we talk about our experience in auctions
24	and, you know, others can do the same thing.
25	There's no question about that, right? But in the

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end, why does it matter? I'm going to walk you through, over here on this right column, a real transaction, a typical transaction.

The utility says — this is power, this time — "I'm going to buy seven-days-a-week, 24-hours-aday, around-the-clock power for the calendar year 2018." Okay? So that's a standard product that you can buy. The customer says — well, through their research and effort. "Here's what I would like to pay for this product"; they set their target. Dollars per megawatt-hour, \$33-and-change, okay? The auction is run. The final price on that auction: \$31.10, so below what the customer's target was. Okay? By about two bucks. \$2.71. Ιf you look at how many megawatt-hours are in that calendar year period, it turns out to be a sizable chunk of money [indicating]. Okay?

And here's some other examples. This stuff matters. That's the bottom line, here, right? And if you can drive out some excess margin on the supplier side, I contend it puts money back in people's pockets to be used for paying mortgages, putting kids in school, buying lunch money, buying lunches, all that sort of thing. It's real money. All right? So that's a great example.

1	Alex, you want to add anything to that?
2	MR. HOUGHTALING [EnerNOC]: Nope.
3	MR. RAPHAEL HERZ [EnerNOC]: All right.
4	[Reference: Presentation Slide 12]
5	So, over here — we're not the only ones who
6	believe in this, and World Bank did a <u>study</u> , among
7	many. And I'm leaving you with a copy [indicating]
8	that talks about some of the benefits. And they
9	specifically look at a municipal auction in Florida
LO	that we reference here, and, per guidelines, you've
L1	got the web link and you've got the paper copy.
L2	And so, with that, Alex, do you want to go, on
L3	this last one?
L4	MR. HOUGHTALING [EnerNOC]: Sure. So, again,
L5	we thank you for your time.
L6	[Reference: Presentation Slide 13]
L7	We've had many of these conversations over the
L8	past several years, and we always enjoy the
L9	questions that we have, because the reality of it
20	is procurement is something that is being done
21	every single day, and, necessarily, there's a
22	method that already exists. So, we find there's a
23	rich topic of discussion around applying, perhaps,
24	more innovative methods that can help the utilities
2.5	with which we work he more transparent have a more

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robust competitive landscape, and, ultimately, work in better collaboration with the regulatory bodies because they have the documentation and they've run their procurements with the higher level of transparency that I think allows for easier communication and a higher level of accountability between the utility and regulatory bodies.

So those are our remarks. We thank you for your time, and look forward to any questions that you have.

CHAIRMAN WHITFIELD: Well, we'd like to thank both of you for your presentation. We'll take a few Commissioner questions — I think we may have a few. But I would like to, first of all, have the Commission thank you for coming in here and thank you for making your presentation. And I think — I guess maybe to preface any questions, I think the two of you probably are aware we are in a state where we have vertically integrated markets; we're not in a regulated market. And we do have a few proceedings where we can see some of your principles might be applicable. We have fuel proceedings in our electric cases, and we have also annual purchased gas adjustment hearings with our LDCs, our natural gas companies, that we regulate.

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But, with that, I'm going to turn it over $-$ I
may have one at the end I might want to ask you, if
it doesn't get asked, but I'm going to turn it over
to Commissioners for questions. Commissioner
Bockman, did you have a question?
COMMISSIONER BOCKMAN: Yes.

Good morning, gentlemen. When you say you run these transactions, what exactly do you do?

MR. HOUGHTALING [EnerNOC]: Perfect. So, I like to think of ours as a three-step process, when we partner with a utility. So the first is the work we do before an auction is conducted, where we meet with them and we understand their goals, we understand the product. And then we work to, in a sense, enhance the marketplace by actively reaching out to the supplier community to get them interested in the product. We find that that's very important, because current methods that utilities employ, we find, sometimes don't shake the tree enough to create competition within the market, so we help them with that.

Once that is done, an RFP is issued, and an auction date and time is set. And, as was mentioned, we recommend auctions typically run 10 to 15 minutes, depending on the product. We find

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that that does spur the human competitive element.
And so we will be on-site in a boardroom with
utility partners, and we will have the live
exchange up and running. And at a fixed time, each
supplier, from wherever they are logging in with a
secure login, can begin entering their bids to
compete in the auction. There's a running
descending clock where they know exactly when the
auction's over.
And once the auction's done, our partners
confer and they make decisions about awards. They

And once the auction's done, our partners confer and they make decisions about awards. They make decisions about supplier diversity. They make all the prudent decisions they need to make, in terms of how they will or if they decide to award the award, the auction. And then, following that, our team provides a level of documentation that can be used for conversations with commissioners, to help you be sure that each auction was conducted with a high level of accountability and transparency.

COMMISSIONER BOCKMAN: How long have you been providing these services?

MR. HOUGHTALING [EnerNOC]: So, EnerNOC purchased World Energy, which was another local firm in Massachusetts, that had been running this

1	since 2007. So we've been in business for over a
2	decade.
3	COMMISSIONER BOCKMAN: And for what utilities
4	have you provided these services?
5	MR. RAPHAEL HERZ [EnerNOC]: Alex, I'll take
6	that.
7	So, I appreciate that question. That one is
8	fairly difficult for us to answer in this
9	environment. We'd be happy —
10	CHAIRMAN WHITFIELD: Mr. Herz, could you get
11	your microphone on? Just hit the button, for the
12	one in front of you.
13	MR. RAPHAEL HERZ [EnerNOC]: [Indicating.]
- 4	All right. So, in this environment, that's
14	,
14 15	difficult for us to answer, because our partner
15	difficult for us to answer, because our partner
15 16	difficult for us to answer, because our partner utilities have, in our legal construct, have asked
15 16 17	difficult for us to answer, because our partner utilities have, in our legal construct, have asked us to refrain from using their names, so we have to
15 16 17 18	difficult for us to answer, because our partner utilities have, in our legal construct, have asked us to refrain from using their names, so we have to go out and get permission. So what I would say to
15 16 17 18	difficult for us to answer, because our partner utilities have, in our legal construct, have asked us to refrain from using their names, so we have to go out and get permission. So what I would say to you, the easiest way to look at this, is we have
15 16 17 18 19 20	difficult for us to answer, because our partner utilities have, in our legal construct, have asked us to refrain from using their names, so we have to go out and get permission. So what I would say to you, the easiest way to look at this, is we have run auctions in 18 regulated states on the
15 16 17 18 19 20 21	difficult for us to answer, because our partner utilities have, in our legal construct, have asked us to refrain from using their names, so we have to go out and get permission. So what I would say to you, the easiest way to look at this, is we have run auctions in 18 regulated states on the wholesale side, simply on the wholesale side, 18
15 16 17 18 19 20 21 22	difficult for us to answer, because our partner utilities have, in our legal construct, have asked us to refrain from using their names, so we have to go out and get permission. So what I would say to you, the easiest way to look at this, is we have run auctions in 18 regulated states on the wholesale side, simply on the wholesale side, 18 regulated states, 13 deregulated states and

federal - we also have federal business.

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MR. HOUGHTALING [EnerNOC]: Sure. So, this
technology — the process is a little bit different
for wholesale versus the retail markets, but
overall we've conducted 60,000-plus auction events,
and we work in the federal sector, we work with, of
course, utilities in the regulated and deregulated
space. We partner with over 100 utilities in the
country. So, despite not being able to directly
answer which specific utilities we partner with, I
think what's important is that the scope of
utilities we partner with is vast and that we work
with regulated, deregulated, small, large,
municipalities, cooperatives, investor-owned
utilities, so — if that helps.
MR. RAPHAEL HERZ [EnerNOC]: And we're happy

MR. RAPHAEL HERZ [EnerNOC]: And we're happy to figure out a way with Mr. Bateman and Mr. Melchers' guidance, on how to provide you with that information.

COMMISSIONER BOCKMAN: Couldn't a utility do this same thing itself?

MR. HOUGHTALING [EnerNOC]: Sure. So, it's a great question. And it often comes down to a build-or-buy decision. Utilities employ very capable, smart people, and of course they can build something similar to this. We contend that it's

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our ability to have market expertise across many
regions that is helpful. It ends up being less
expensive if we run the process for them, because
there are significant IT costs to build an
exchange, in effect. And then, ultimately, there
is no financial relationship between our firm and
utilities. Suppliers pay us to — if they've won
the auction, they pay us directly. So utilities
find that, in a sense, outsourcing this arm of it
not only is more cost-effective but it ultimately
helps the transparency, as well, because it's a
third party that's being responsible for running
the events.

COMMISSIONER BOCKMAN: And your pricing to the supplier, presumably, your costs are incorporated in the costs the utilities pay those suppliers.

MR. HOUGHTALING [EnerNOC]: That's right.

COMMISSIONER BOCKMAN: And so what are the costs for your services?

MR. HOUGHTALING [EnerNOC]: So, it's a good point. So, in effect, one could argue that the ratepayers ultimately do pay, of course, because it is included in that. But we use, as a proxy, the size of the procurement that's being conducted, because, in effect, the larger and more complex the

1	procurement, the more upfront time is required for
2	us, and the greater investment is required, for us
3	to perform. So we have a scale, depending on the
4	overall size of the procurement.
5	COMMISSIONER BOCKMAN: A percentage of the
6	size of the —
7	MR. RAPHAEL HERZ [EnerNOC]: Typically, a
8	volumetric fee that we attach to this. But one of
9	the things — and I think it's a great question that
10	you bring out — our objective is that here
11	[indicating] is that price where — Alex would you
12	get me back to that slide with the four boxes?
13	MR. HOUGHTALING [EnerNOC]: [Indicating.]
14	MR. RAPHAEL HERZ [EnerNOC]: Keep going. One
15	more. One more. One more? And the next one.
16	Next one?
17	[Reference: Presentation Slide 11]
18	This one. Okay, so here we go. So it's
19	easiest for me to explain it this way, all right?
20	So the customer has that target [indicating]. We
21	have a fee that has to live inside of whatever that
22	transaction price is — and I touched that screen.
23	MR. HOUGHTALING [EnerNOC]: [Indicating.]
24	MR. RAPHAEL HERZ [EnerNOC]: And what we've
25	observed is that our fee cannot impact the outcome

1	of the auction, okay? So if our fee is
2	significant, then you're probably thinking, "Well,
3	the supplier's just going to attach their fee to
4	the bid." But we've got to make sure that our fee
5	doesn't have a significant impact on the outcome
6	here. And because of the auction method, it's
7	compressing the supplier margin down to what the
8	supplier can afford to sell at, as opposed to what
9	they would like you to buy at. And our fee lives
10	in that area, okay? I hope I explained that.
11	COMMISSIONER BOCKMAN: I understand. Thank
12	you, gentlemen.
13	Mr. Chairman, that's all the questions I have.
14	Thank you, sir.
15	CHAIRMAN WHITFIELD: Thank you, Commissioner
16	Bockman.
17	Commissioner Elam.
18	COMMISSIONER ELAM: Good morning.
19	MR. HOUGHTALING [EnerNOC]: Good morning.
20	COMMISSIONER ELAM: Is all of this dependent
21	on suppliers adopting this? A system like this?
22	MR. HOUGHTALING [EnerNOC]: So, we — when we
23	conduct an auction, absent a robust supplier market
24	there's no auction, so we maintain close
25	relationships with suppliers across the country and

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we, in a sense, become the marketplace for these
transactions to occur. And what's, I think,
important is that we've articulated what we think
are the benefits for a utility to partner with us,
but there are benefits for suppliers to partner
with us, as well, because they know that there is a
very high likelihood that an award will be made
when a procurement is run with this level of
transparency. They know that, if they aren't as
large a supplier as some of them in the market,
that they still have a fighting chance to be
awarded, because it's open; it's transparent.

COMMISSIONER ELAM: And that presupposes the utilities or the large customers have also bought into this system.

MR. HOUGHTALING [EnerNOC]: Correct, yes. And I think one of the things that that speaks to our role as a marketplace is that we're an objective party and we have partners who transact both on the buy and sell side. So on one day, they're transacting through us to purchase; on the next day, they're shedding load. So, to me, that suggests to me that they see the benefits of both sides of the table, if that helps.

COMMISSIONER ELAM: I'm just trying to figure

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out the motivation of a supplier or the motivation
of the utility in a vertically integrated market.
I mean, if the supplier is going to, you know, be
forced to accept a smaller margin by adopting this
sort of auction method, why would they do that?

MR. HOUGHTALING [EnerNOC]: So, I suggest that it's their ability to win the business if they want to win the business. And, earlier, I had mentioned what was perhaps not the best articulated example of the real estate market, where, if a supplier had the chance to slightly improve his or her bid to be able to win the business, if they would do that, this gives them the opportunity to do that.

Wherein, with a sealed bid, it's not necessarily a shot in the dark but there's less price discovery, so there's less assurance they're going to win the business if they really want it.

MR. RAPHAEL HERZ [EnerNOC]: I'll add to that, and I think what it does is it levels the playing field among the suppliers, and in the — and if I'm a supplier, it would be — can you hear me [indicating]? If I'm a supplier, I'm going to want an equal chance to win the business, rather than an unequal chance, okay? So while they might experience margin compression, in the end what they

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know is, through this method, there's a high degree
of likelihood that there will be a transaction,
that somebody will win, and they want to win that
business. Again, it brings them back to what they
can afford to sell you, as opposed to what they
would like you to buy it at.

COMMISSIONER ELAM: In the vein of why you're here —

MR. RAPHAEL HERZ [EnerNOC]: Right.

COMMISSIONER ELAM: — does adoption of this kind of a system presuppose that this Commission's judgment of prudency in purchasing would require a utility to show why this wasn't a prudent way to go about their business?

MR. HOUGHTALING [EnerNOC]: So, if I understand your question, I think what's — it's, of course, important that anytime a decision or a recommendation that suggests a switch in style — it's, of course, important that it be evaluated and that it be prudent. We have ample evidence to suggest that ours is a method that delivers more competitive results, but, of course, it's a decision that's made by commissions; it's a decision that's made by utilities every time they choose to work with us. And we work with them on a

1	transaction-by-transaction basis. And to Raphael's
2	earlier point, sometimes they see products for
3	which this is a good fit, and for other products
4	this is not the path they choose. And so to
5	continue with the metaphor, it's a tool that they
6	can employ when appropriate, but, of course, having
7	the proper level of scrutiny to make sure that this
8	is a prudent decision in a given market is
9	important.
LO	MR. RAPHAEL HERZ [EnerNOC]: Did we answer
L1	your question?
L2	COMMISSIONER ELAM: Yeah, I think so.
L3	MR. RAPHAEL HERZ [EnerNOC]: Okay.
L4	COMMISSIONER ELAM: And is this system being
L5	used anywhere in the Southeast?
L6	MR. RAPHAEL HERZ [EnerNOC]: Yes.
L7	COMMISSIONER ELAM: Can you tell me what
L8	states? Or is that going too far?
L9	MR. RAPHAEL HERZ [EnerNOC]: I can tell you
20	that we certainly use it in Florida for multiple
21	utilities.
22	COMMISSIONER ELAM: Okay.
23	MR. RAPHAEL HERZ [EnerNOC]: And then, there
24	are other states where, if I told you the state,
25	you'd be able to figure it out.

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COMMISSIONER	ELAM:	Ι	don't	know,	some	days	Ι
don't have enough	coffee.						

MR. RAPHAEL HERZ [EnerNOC]: I'm with you.

COMMISSIONER ELAM: Thank you.

MR. HOUGHTALING [EnerNOC]: Thank you.

CHAIRMAN WHITFIELD: Thank you, Commissioner

Elam.

Commissioner Randall.

VICE CHAIRMAN RANDALL: Thank you, Mr. Chairman.

I just have one quick question. I was looking at your example. It looked like the whole auction lasted about six minutes. Is that normal?

MR. RAPHAEL HERZ [EnerNOC]: Yes, sir.

VICE CHAIRMAN RANDALL: Okay.

MR. RAPHAEL HERZ [EnerNOC]: Quite simply.

We've done five minutes to — you know, it depends on the — you know, if we're going out for pricing, we might do it for five minutes. Again, this notion of bidder fatigue is real, and so if we have seven or eight different pricing events inside of a morning, we might run the first one for 10 minutes and the next five or six for five minutes. So, five, ten, fifteen minutes, totally normal.

MR. HOUGHTALING [EnerNOC]: If I may add,

1	that's not a decision that's made in a vacuum. We,
2	of course, make recommendations based on our
3	experience, but the strategic component of all of
4	these auctions is determined by our partner. So
5	the construct is very nimble for a given product,
6	and utilities ultimately make every call about how
7	it's run.
8	VICE CHAIRMAN RANDALL: Thank you.
9	Thank you, Mr. Chairman.
10	CHAIRMAN WHITFIELD: Thank you, Commissioner
11	Randall.
12	Commissioner Hamilton.
13	COMMISSIONER HAMILTON: Thank you, Mr.
14	Chairman.
15	I've been very intrigued by your presentation.
16	It's been very interesting and something that I
17	don't think most of us were aware of. But where do
18	you start? At the index price for the day?
19	MR. RAPHAEL HERZ [EnerNOC]: Well, so, again,
20	tools in the toolbox. What we see is that if —
21	I'll just pop back to this slide here [indicating].
22	[Reference: Presentation Slide 3]
23	And I'll try not to touch that screen. For
24	certain products, this [indicating] makes sense.
25	For something like a day-ahead or spot-market

product, it does not make sense. It just is
inefficient, right? And I'm wired towards
efficiency. Not everybody is. But some of these
other things, it doesn't make sense. So where we
say start at is a product that looks at a term that
has, roughly, a month or longer. Maybe seasonal,
three months, maybe half a year, or a year. Maybe
it's a three-year product, maybe it's a five-year
product, but it's in that range. And I'll add to
that — it's a great question, where do you start.
What we find most often is that the starting point
is around a specific product which tends to look
at: What is the commodity? Where is it being
delivered? And what is the term? Those are
probably the bigger ones. Then there's other
things that kind of come in. But if somebody says,
"I'm going to buy something," well, how much do you
want to buy? Where do you want it delivered to?
That's the starting point. But, again, one month
to, call it, five years.

COMMISSIONER HAMILTON: Okay. On a reverse auction, when does the supplier have an opportunity to say. "That is low. I'm not going any further," and to not accept the bid?

MR. RAPHAEL HERZ [EnerNOC]: I'll pop back -

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Alex, take this just for a second, if you will.
See if I can get the right slide here [indicating].
[Reference: Presentation Slide 10]

So this slide is kind of a little bit hard to read, but this [indicating] was the end point of this pricing event and this [indicating] was the beginning. So Bidder H was the first one to jump in. Well, after they got in and started watching the bidding, they decided they'd back out. All right? A went all the way. Look at D. D is here [indicating], and they show up again here [indicating] and they show up again here [indicating]. But they exited when the price was what we call at flat, at the index point. They said, "Okay, I can't make any more money at this. I'm going to exit." So they make that decision.

And we frequently — so, I ran an auction on Monday — frequently see this sort of behavior going on [indicating]. In this case, A took it all the way. But sometimes you might have two bidders going head-to-head, or you might have three of them going head-to-head, to drive that price down for the business.

COMMISSIONER HAMILTON: Okay. Let's say what we talk about is gas.

1	MR. RAPHAEL HERZ [EnerNOC]: Yes, sir.
2	COMMISSIONER HAMILTON: Is transportation — do
3	y'all —
4	MR. RAPHAEL HERZ [EnerNOC]: We typically
5	don't work in that space. We're more about the
6	actual molecules. But because transportation is
7	woven in there, we have to consider it at times, so
8	– but, usually, if I'm a gasifier, LDC – right? – I
9	might have a contract for transportation, and I
10	might say "Okay, can you deliver it at Milepost
11	159? Or can you deliver it at Milepost 72?" And
12	I'll get my pricing, and I say, "Well, I've got
13	transportation. I'll do the math and figure out
14	where is the cheapest place for me to buy, using my
15	transportation or not."
16	COMMISSIONER HAMILTON: Okay. Thank you, very
17	much. Again, I enjoyed your presentation and I
18	think we'll all be better off for being here, this
19	morning. Thank you.
20	MR. RAPHAEL HERZ [EnerNOC]: Thank you.
21	MR. HOUGHTALING [EnerNOC]: Thank you.
22	CHAIRMAN WHITFIELD: Thank you, Commissioner
23	Hamilton.
24	Commissioner Howard.
25	COMMISSIONER HOWARD: I guess I don't know how

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to ask this, but exactly what are you looking for?
When you leave here and you say, "Well, we wowed
that Commission. We did this," what do you want to
leave here for us to take out of this room?

MR. RAPHAEL HERZ [EnerNOC]: I think the most important thing is that you are aware that utilities are evolving the way they buy, and they have different tools at their disposal. And so, if somebody were to come talk to you tomorrow or next week, whether it's in DC or here in Columbia — doesn't matter — and they say, "I ran a reverse online auction," you're aware of what that means. I think that's the most important thing that I can say, with this group.

commissioner Howard: And in a rate case, it is in the cost of fuel that where, when we go for a rate — when the utility comes in for a rate case or a fuel adjustment hearing, there are your prices in the cost of fuel, is what you're saying?

MR. RAPHAEL HERZ [EnerNOC]: That's correct, what we're saying. Yes, sir. Our services, our fee, is in there. And I will tell you, this is the way that we set up our business. Not all competitors have set it up — so I just want to be clear about that. We run it at a no risk to the

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utility transaction. So if our fee is in there, or not, doesn't matter, and the utility decides they don't want to transact, doesn't matter. We take that as part of our business development cost. So our job — Alex and my job — is to deliver successful auction outcomes. We don't care what the price is. We just want the customer to be happy. And that's where we live.

MR. HOUGHTALING [EnerNOC]: Right.

COMMISSIONER HOWARD: Why does your method make for more business? Why does either bidder want to go into — for several reasons, why would I want to enter into your bidding process?

MR. RAPHAEL HERZ [EnerNOC]: It's a great question, and the challenge here is, what we've seen in the bidder universe is that they enjoy price discovery. So we create that market for the moment, and they will watch and see where does that product settle. "How do I need to adjust my business to be able to win the business of the other party?" So that's the price discovery piece; that's what they enjoy. The other thing that they enjoy is knowing that their efforts are not for naught. And I'll say it differently: If there's a transaction to be had here, and if this is going to

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be run through this platform, I know, when I go and
marshal my resources on the pricing desk and
everywhere else, that somebody's going to win that
business and we've got a fair chance of competing
at that. So that's the other thing that they
enjoy.

Now, I will tell you, they don't enjoy the margin compression. But we have suppliers, large national suppliers, who look at this auction platform as the majority of their book of business now. So this has happened over time. Earlier the question was asked, how long have we been doing this? Over the decade, what people have realized is, "This is a place where we can make money."

COMMISSIONER HOWARD: Does this compromise, as
a bidder - does this compromise any confidentiality
I might want in my business?

MR. HOUGHTALING [EnerNOC]: The level of transparency during an actual auction is tightly controlled. So what our partner, the utility, would see is very different than what a supplier would see. So we've mentioned several times that price discovery is a component of this, but what's visible is limited to the actual price. Suppliers don't know who is offering the prevailing low bid;

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they don't know how many bidders are in play. So
they, in a sense, can't reverse-engineer this to
figure out, from a competitive standpoint, how to
game the system. All they see is the prevailing
low bid, and if they, indeed, are the prevailing
low bid, or not.

COMMISSIONER HOWARD: But they don't know who Bidder A is.

MR. HOUGHTALING [EnerNOC]: Correct.

know how many bidders there are; they don't even what the volume is, if volume is one of the variables which, frequently, it is. All they see is that lowest price. And so some young upstart business trading gas might be able to only provide 10,000 dekatherms — whatever unit that means — but they might, because they've got lower operating costs, might be able to offer a better price.

Well, large, big supplier only sees, "Wow, that price is pretty low. If I want to win the business, I've got to bring my price down there," even if they can offer a much greater volume.

COMMISSIONER HOWARD: Thank you, very much.

MR. RAPHAEL HERZ [EnerNOC]: Sure.

MR. HOUGHTALING [EnerNOC]: Thank you.

1	CHAIRMAN WHITFIELD: Thank you, Commissioner
2	Howard.
3	I believe our — I have one question for you,
4	but first I believe our attorney, Mr. Melchers, may
5	have a question for you. Mr. Melchers?
6	MR. MELCHERS: Thank you. Mr. Chairman.
7	The question is on this same slide. I'm
8	curious that — you're saying that price discovery
9	is important, and yet the last bid is blind.
10	MR. RAPHAEL HERZ [EnerNOC]: Yes.
11	MR. MELCHERS: I'm not really understanding
12	how you make the determination that it's the last
13	bid.
14	MR. HOUGHTALING [EnerNOC]: Right. That's a
15	good question. And, so, when you brought up the
16	term "price discovery," it led me to something
17	else, too. So, let me just say first, when I say
18	"price discovery," it's important to be noted that
19	this isn't public. So for a supplier to bid into
20	this, they, of course, need to be vetted and
21	approved and all the requisite paperwork needs to
22	be in place. They can't just log into the system
23	and observe an auction; they have to enter a viable
24	bid to be able to see the auction progress. So
25	that's the first point. As it relates to your

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question about the last bid being blind, it's
really a tactical thing, in the sense that it takes
a few seconds to enter a bid and to type the bid in
and then press enter, and in those few seconds, in
effect, everyone's last bid becomes blind. So what
we'll see, or I should say what we envision, is
that in the remaining 30 seconds of an auction, all
the suppliers around the country or around the
region have entered in their lowest price and
they're all hovering over the keyboard waiting to
press enter at that last second. So, in effect,
that last entry becomes blind, but they've had the
benefit of price discovery throughout to be able to
sharpen their pencils and get really aggressive.

 $\mbox{MR. RAPHAEL HERZ [EnerNOC]:}$ And if I may add to that -

[Reference: Presentation Slide 9]

- the system - it's a design feature of the system, such that the supplier, when they enter in their - this is the same thing as we saw in numerical format earlier. When Bidder A entered that last bid [indicating], they had to go to another screen in the browser, where they don't see time, they don't see what that lowest bid is.

They've got to enter, they've got to verify that

1	they didn't ultimately make a mistake, and in that
2	duration all the other suppliers could be doing the
3	same thing, entering in another number, okay? And
4	that's where somebody loses and somebody wins. And
5	so, in that last — in those last 37 seconds,
6	whatever it is, they're going in and making sure
7	they entered their last and best bid. And that got
8	A to here [indicating]. I hope that explains it.
9	MR. MELCHERS: It explains it very well. I
LO	realized suddenly that you're talking about several
L1	of my eBay experiences.
L2	MR. RAPHAEL HERZ [EnerNOC]: Yes.
L3	MR. MELCHERS: Everybody's waiting for the
L4	last 15 seconds of the deal to throw in that final
L5	maximum.
L6	MR. RAPHAEL HERZ [EnerNOC]: Yes, so if you're
L7	an eBay user, you have some experience here, no
L8	question.
L9	MR. MELCHERS: Thank you, so much.
20	MR. HOUGHTALING [EnerNOC]: Thank you.
21	CHAIRMAN WHITFIELD: Thank you, Mr. Melchers.
22	I noticed his question of you, between the last and
23	the final was 12 seconds, is what I saw on your
24	chart there.

Yeah.

Right.

MR. RAPHAEL HERZ [EnerNOC]:

1	[Reference: Presentation Slide 10]
2	CHAIRMAN WHITFIELD: So they were hovering
3	over the keyboard.
4	MR. HOUGHTALING [EnerNOC]: Yeah. Common
5	practice, yes.
6	CHAIRMAN WHITFIELD: It looks like
7	Commissioner Elam may have one more, before we —
8	COMMISSIONER ELAM: Just to run that, once you
9	brought eBay into it, people find ways to game eBay
10	to — electronically, to write some sort of program
11	to move at the speed nobody else can do with their
12	finger over the keyboard. Possible, here?
13	MR. RAPHAEL HERZ [EnerNOC]: We monitor this
14	very closely, right? We pay very close attention.
15	We are in touch with the suppliers, and our system
16	is set up so that we would notice if somebody had
17	done some sort of robot script to be able to do
18	this. Our experience is, they haven't yet. You
19	know, could you put 1000 engineers at it, and
20	figure it out? Look, I tend to be very direct.
21	Sure, somebody could figure it out. But we pay
22	close attention, because, quite seriously, the
23	integrity of the process and the integrity of the
24	suppliers matters here, because if people start
25	smelling things foul, the whole thing starts to

1	collapse. So we have to police, to make sure that
2	the process has high integrity.
3	COMMISSIONER ELAM: Thank you, Mr. Chairman.
4	CHAIRMAN WHITFIELD: Thank you, Commissioner
5	Elam.
6	Looks like Commissioner Howard's got another
7	follow-up.
8	COMMISSIONER HOWARD: Have you ever had a tie?
9	And what happens if, at the last minute,
10	everybody's done and you've got a tie?
11	MR. HOUGHTALING [EnerNOC]: So, that can
12	happen. And, if it does happen —
13	CHAIRMAN WHITFIELD: Sudden death.
14	MR. HOUGHTALING [EnerNOC]: Yeah, right.
15	Start again. So, each supplier is trained in
16	advance of every auction not just on how to
17	participate in the auction, but on the rules that
18	govern the auction. And, really, the short answer
19	is there is a component of utility discretion when
20	making award decisions. So if the utility elects
21	to award and choose, sometimes they elect to split
22	the quantity, sometimes they award to whichever
23	supplier's more diverse. But it is at their
24	discretion when making an award.
25	MR. RAPHAEL HERZ [EnerNOC]: And so the rules

of the procurement can also be established up
front. And some of our utility partners might say
first in, the person with the first bid in wins.
So those rules are determined by the utility, and
we are in the business of bringing everybody to the
party, ultimately, and making sure there's a high
degree of competition. In the end, it's the
utility or the customer that makes the decision on,
"If it's a tie, do I want to split it, do I want to
give it to the first one in, do I want to — what do
I want to do?" That's — you know, and it can be
predetermined.
COMMISSIONER HOWARD: Well, does the utility
have to take the low bid?
MR. RAPHAEL HERZ [EnerNOC]: No, sir.
MR. HOUGHTALING [EnerNOC]: The utility
doesn't have to take — it definitely doesn't have
to take the low bid. It doesn't have to make an
award at all, if they elect not to. But the reason
they don't need to take the low bid is because,
often, diversity concerns are present, and so
that's why it is so important that we train the
suppliers in advance, so they know.
COMMISSIONER HOWARD: Thank you

MR. HOUGHTALING [EnerNOC]: Thank you.

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CHAIRMAN WHITFIELD: Thank you, Commissioner Howard.

And I'm going to ask one question of you. It might not be the best analogy, but, actually, Commissioner Howard, in his very last sentence there may have gone there, where I'm going. When you look at the utility procurement transaction types — I think it was your page three.

MR. HOUGHTALING [EnerNOC]: [Indicating.]

[Reference: Presentation Slide 3]

CHAIRMAN WHITFIELD: And you talk about the physical assets that utilities procure for both electric and gas, and then you get down to the red box, which is the commodities part of it. And I guess where I'm going with this — Commissioner Hamilton and Commissioner Elam both talked about the incentive for the supplier to participate and to be involved. I'm going to go to the opposite of that, back to the utility, to the entity doing the procuring, and their incentive to be involved, and back to what Commissioner Howard last said with the low bid. What I would use — you used your analogy about the real estate transaction that you missed out on because you didn't know if you just went another \$500 or \$700 or whatever it was, you might

could've won that purchase on that real estate
deal. Well, conversely, again, might not be the
same or best analogy, but it's similar. I was
looking at selling some of my parents' furniture,
and I looked at an online service, and the online
service, it all hinges — and I think your service
does too — on the participants, and the number of
participants being great. And this online service
told me, he said, "Well, you know, we're going to
do this during a certain time window," just like
you're doing, and the minimum bid — say if it's on
a certain piece of furniture that I think is
antique or old, it might be worth a couple thousand
- he told me the minimum bid of \$25 was it, and
once this online period is over, I had to accept
that. And that, for me, was a deal breaker. As
the participant on my end, why should I unload
something that might be worth \$2000-3000 for \$25.
And same thing with this end. If the utility
doesn't have the level of participants from the
supplier side — now, you just told Commissioner
Howard that they didn't have to accept. But where
is a minimum number? Where do you — and
Commissioner Hamilton, I think, almost — where do
you start? And what is the obligation, if they

1	don't have to accept the low bid, as you just told
2	Commissioner Howard, what is the obligation of the
3	utility for participating in this?
4	MR. HOUGHTALING [EnerNOC]: Sure. So there
5	are two really good questions there. One is
6	theoretical and then one is really tangible. So
7	the theoretical one first: You are right, in that,
8	unlike what you found online, selling furniture,
9	the utility partner of ours is not beholden to a
10	transaction. So, if —
11	CHAIRMAN WHITFIELD: So, they're not locked
12	in.
13	MR. HOUGHTALING [EnerNOC]: No. No.
14	CHAIRMAN WHITFIELD: Just like you told
15	Commissioner Howard, there's nothing binding.
16	MR. HOUGHTALING [EnerNOC]: No. It's all
17	about them being satisfied with the price. So if
18	an auction is run, and they're not satisfied, then
19	they can elect to walk away and not award, and
20	that's fine.
21	CHAIRMAN WHITFIELD: What does that do to the
22	credibility of what you're doing, or arrangements
23	that you might've made? What repercussions are
24	there on your end?
25	MR. HOUGHTALING [EnerNOC]: It weakens the

strength of the auction model if suppliers don't
see awards being made. And so, we don't like that
to happen — because you're right, it ultimately
reduces the credibility of this marketplace that
we've developed. So to protect that from
happening, which will touch on the more tangible
question, to protect that from happening we work
very closely with our partners in advance, to do
the appropriate market research and sometimes we'll
run an indicative bid round with suppliers to get a
good understanding of where the market is, such
that we're confident that we'll be able to get to a
price at which they'll transact. So if we don't
think that's going to happen, we will confer with
the utility and we may elect not to run that
product, or change elements of it, or change the
opening price, so that that definitely is something
that we work out in advance.

CHAIRMAN WHITFIELD: Have you had that happen?

Have you had them — with any frequency — utilities

reject or not accept what has happened in your

online —

MR. HOUGHTALING [EnerNOC]: So, that has happened, and it's infrequent. We maintain a 99 percent transaction rate. There are things that

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occur sometimes that make it unsatisfactory for the utilities, but at a 99 percent transaction rate, we think that the work we do up front to really gauge expectations and to create an environment where transactions will occur contribute to that high transaction rate.

MR. RAPHAEL HERZ [EnerNOC]: [Indicating.] [Reference: Presentation Slide 11]

So let me just add to that really quickly. In this instance here [indicating], the customer had set a target. We had worked with them — as we do with all of our customers — to figure out, can we deliver at or below that? Right? Because we know, through this 99 percent success ratio, that if we can't get there, then we're going to alert the customer well in advance. And then sometimes, stuff happens in the marketplace and, so, it's not perfect but it's pretty good. And that's where the supplier confidence comes in.

MR. HOUGHTALING [EnerNOC]: Actually, if I may, I didn't answer your first question, which was on the number of suppliers. And that's a really important point. If we find that we don't have enough counterparties to create a high level of competition, then we would suggest that a different

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1	auction method would be more appropriate.
2	Typically — and this depends on the product, but
3	typically we find that if we have at least five
4	counterparties, that creates a good enough
5	marketplace for there to be healthy competition.
6	If it's fewer, then we need to do some thinking.
7	MR. RAPHAEL HERZ [EnerNOC]: Alex, may I add
8	to that?
9	So if we go back to the piece of antique
10	furniture that you were looking at an online — am I
11	off-mic here?
12	CHAIRMAN WHITFIELD: You're on. Just pull it
13	a little closer.
14	MR. RAPHAEL HERZ [EnerNOC]: Okay
15	[indicating]. And so the reason that you elected
16	not to proceed, I'm guessing, is that you thought

[indicating]. And so the reason that you elected not to proceed, I'm guessing, is that you thought the thing was worth more than what you thought you could get in the marketplace. And this gets back to that asymmetry of information. If you could see that there were 1000 transactions of a very similar piece of furniture, same era, same make — maybe a different maker — maybe different curlicues and handles, or whatever, and you knew that that piece was transacting in the, you know, \$1752-\$2500 range, but the rules were, "Hey, they've got to

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start at \$25," you'd be like, "Okay, well, that's fine, because I found a lot of evidence that there's people out there who want it and are going to pay what I'm looking for it." You weren't So if we take that same analogy and we confident. look at commodities, I submit to you — all of you probably have smart phones and you can probably figure out what the price of something is online in a matter of, you know, probably hours if not minutes, and that's the notion behind a commodity is that the price is vastly known. And that's what makes it different from that piece of furniture, because if we set an opening price of, you know, I don't know, \$50 - right? - we know that the bidders are going to be able to come in at and go beyond or go below \$50 or go, you know, for selling, go Either way. So, you know, there is a lot of strategic elements and thoughtfulness that go into auction architecture, and no matter who the utility uses, you've got to find somebody that understands that piece of it. Now, did I do an adequate job of comparing antique furniture with commodities?

CHAIRMAN WHITFIELD: You did. And the service

— I don't know their ratio, but they could be in a
maybe not 99 percent successful transaction ratio,

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like you, but	possibly in the 90s, you know.	I do
think they're	very reputable and pretty high,	but
the mere fact	that I don't know —	

MR. RAPHAEL HERZ [EnerNOC]: Right.

CHAIRMAN WHITFIELD: — and the fact that once I do enter into that, it's gone, and I do have to, no matter what happens — if one bidder comes in at \$25, it's gone — no matter how successful, whether it's 99 percent like you or not, I didn't like the notion that it's an absolute thing, is —

MR. RAPHAEL HERZ [EnerNOC]: Yeah.

MR. HOUGHTALING [EnerNOC]: Yes.

MR. RAPHAEL HERZ [EnerNOC]: Our methods and others' methods are, what I would say, tested in the industry. And so they have evolved over the period of a decade, plus, to be like this. If there were an easier, better way, we'd probably go there. But reality is, a utility doesn't want to be locked into a transaction, so we've got to do this on our dime, but if we're going to do it on our dime, we've got to make sure that we're pretty good at it.

CHAIRMAN WHITFIELD: Well, you sort of

1	answered that, too, in Commissioner Howard's last
2	line, when you said they're not locked in. It's
3	not absolute.
4	MR. RAPHAEL HERZ [EnerNOC]: It's not
5	absolute.
6	CHAIRMAN WHITFIELD: Okay. I don't see
7	anything further. I think that you've answered all
8	our questions, and we certainly thank both of you
9	for coming in and bringing this very informative
10	panel before us.
11	Mr. Bateman, is there anything from the Office
12	of Regulatory Staff?
13	MR. BATEMAN: Nothing from ORS.
14	CHAIRMAN WHITFIELD: Well, if not, we thank
15	you again for your informative panel, and thank you
16	for being with us, and this allowable ex parte is
17	adjourned.
18	[WHEREUPON, at 11:45 a.m., the
19	proceedings in the above-entitled matter
20	were adjourned.]
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CERTIFICATE

I, Jo Elizabeth M. Wheat, CVR-CM-GNSC, do hereby certify that the foregoing is, to the best of my skill and ability, a true and correct transcript of all the proceedings had in an Allowable Ex Parte Proceeding held before THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA in Columbia, South Carolina, according to my verbatim record of same.

IN WITNESS WHEREOF, I have hereunto set my hand, on this the 2^{nd} day of February , 2018.

Jo Elizabeth M. Wheat, CVR-CM/M-GNSC

Hearings Reporter, PSC/SC

My Commission Expires: January 27, 2021.